

Title (en)  
Method and apparatus for terahertz imaging

Title (de)  
Verfahren und Vorrichtung zur Abbildung im Terahertzbereich

Title (fr)  
Procédé et dispositif pour l'imagerie dans les gammes térahertz

Publication  
**EP 0727671 A3 19970305 (EN)**

Application  
**EP 96300828 A 19960207**

Priority  
US 38893395 A 19950215

Abstract (en)  
[origin: EP0727671A2] Certain material and objects can be characterized by a frequency-dependent absorption, dispersion, and reflection of terahertz transients in signals which pass illuminate the material or object. The present terahertz imaging system analyses that frequency dependence in the time-domain by collecting that transmitted signal propagating through the object and then processing the information contained in those signals for every point or "pixel" on that object. This is a non-invasive imaging technique that is capable of differentiating between different materials, chemical compositions, or environments. <IMAGE>

IPC 1-7  
**G01R 31/265**; **G01N 21/35**

IPC 8 full level  
**G01J 3/28** (2006.01); **G01N 21/17** (2006.01); **G01N 21/27** (2006.01); **G01N 21/35** (2006.01); **G01N 21/49** (2006.01); **G01R 31/308** (2006.01)

CPC (source: EP US)  
**G01N 21/3563** (2013.01 - EP US); **G01N 21/3586** (2013.01 - EP US); **G01N 21/49** (2013.01 - EP US); **G01R 31/308** (2013.01 - EP US)

Citation (search report)  
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